



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,072	07/23/2001	Udo Bickers	514413-3888	2334

20999 7590 07/02/2003

FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151

EXAMINER

CLARDY, S

ART UNIT	PAPER NUMBER
----------	--------------

1616

DATE MAILED: 07/02/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,072

Applicant(s)

Bickers et al

Examiner

S. Mark Clardy

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 14, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 12-30 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 12-19, 21-26, and 28-30 is/are rejected.
- 7) ☒ Claim(s) 20 and 27 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 1616

Claims 1-4 and 12-30 are pending in this application.

Applicants' claims are drawn to herbicidal compositions and methods. The compositions (claims 1 and 16, and those dependent thereon) comprise herbicide, a non-silicone surfactant, and a humectant (listed in claims 1 and 16). The claims may be grouped as follows:

1. Claims 1-3, 4, 12-15: Herbicide compositions, methods of use, and making (mixing)
2. Claims 16-27: Benzoysulfonylurea¹ herbicide compositions and methods of use
3. Claims 28-30: Methods of using benzoysulfonylurea herbicides to control *Bromus*

Related application 09/911,032, now US Patent 6,573,217, differs in specifying grass controlling sulfonamide herbicides and silicone surfactants.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, and 12 are rejected under 35 U.S.C. 102(a) and (b) as being anticipated by any one of the following Japanese patents: JP 58-124702, JP 6-48902, or JP 11-302116.

JP 58-124702 teaches the combination of a herbicide, a surfactant, and a succinate compound.

¹mesosulfuron, rimsulfuron, nicosulfuron, iodosulfuron, foramsulfuron, compounds A1 - A5, p. 44

Art Unit: 1616

JP 6-48902 teaches the combination of an agrochemical (e.g., herbicide), a surfactant, and a solid acid such as citric acid, malic acid, tartaric acid, or succinic acid.

JP 11-302116 teaches the combination of a herbicide (glyphosate), a surfactant, and lactic acid.

Each of these Japanese patents teaches the combination of a herbicidal agent and surfactant with one or more of applicants' recited humectant components. While they are not described as being humectants, their presence in the compositions anticipates applicants' generic claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 12-19, 21-26, and 28-30 are again rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Griffin et al (US 4,441,917), Zeneca (PCT WO 96/00010), and Matsumoto et al².

Griffin et al, again, teach sulfonylurea herbicides which may be combined with various surface active agents (column 6), as well as other adjuvants such as humectants (col 7, line 1) for herbicidal activity against various weeds, including *Bromus tectorum* (Example 6, Table 4). No specific humectants are disclosed.

²Matsumoto et al. "Effect of Humectants on Pesticide Uptake through Plant Leaf Surfaces" Chapter 25 in *Adjuvants for Agrochemicals*, Chester Foy, ed. P. 261-271. 1992.

Art Unit: 1616

Zeneca teaches the combination of glyphosate with additional herbicidal agents such as sulfonylureas (p. 12, "U") such as sulfometuron, metsulfuron, bensulfuron, and primisulfuron, all within the scope of applicants' sulfonylurea definition. Additives include various surfactants (p. 8-9) and humectants (p. 7) such as glycerol, polyethylene glycol, sorbitol, ethylene glycol, propylene glycol, and sodium or ammonium lactate salts, with glycerol, polyethylene glycol, sorbitol, and sodium lactate being preferred.

Matsumoto et al, again, teach that the addition of humectants to pesticidal (herein, 2,4-D and urea herbicides) compositions generally enhances the uptake of the active agents by enhancing moisture retention. It is noted, however, that of the various humectants investigated (i.e., glycerine, ethylene glycol, propylene glycol, sodium lactate, and polyethylene glycol; p. 263, B), sodium lactate appears to decrease herbicidal activity, thus teaching against applicants' invention for this particular humectant.

One of ordinary skill in the art would be motivated to combine these references because they disclose the utility of humectants in herbicidal compositions.

Thus it would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to have combined sulfonylurea herbicides, surfactants, and humectants in a single herbicidal composition because Griffin et al teach such combinations, and because the prior art teaches that surfactants and humectants are conventional additives in the herbicidal art.

Applicants have presented data in the specification demonstrating that sulfonylureas (see footnote 1, above) exhibit enhanced activity in combination with surfactants and sodium lactate, and

Art Unit: 1616

in one case (Table 3), propylene glycol. In view of Matsumoto et al, above, a showing of enhancement of herbicidal activity would not be expected for sodium lactate. Thus claims drawn to this composition are allowable. It is not seen that a single showing for propylene glycol as humectant is sufficient to demonstrate unexpected results for this known humectant which would be expected to behave as taught in the prior art. Note that objective evidence of nonobviousness must be commensurate in scope with the scope of the claims. In re Tiffin, 171 USPQ 294.

Applicants argue that the discussion in Matsumoto et al supports a finding that humectant properties are unpredictable. However, it appears that the reference actually teaches that the behavior of sodium lactate is inconsistent with expectations, not that humectant characteristics are unpredictable.

Claims 20 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Again, with respect to claims 12 and 13, applicants have not presented any method-of-making claims that are anything other than merely combining the components and mixing by conventional means. Thus, the method of making is conventional and therefore obvious. Whether the final product is novel is not controlling of obviousness of the method. See In re Neugebauer, 141 USPQ 205. No particular method of mixing is stated; the simple act of mixing ingredients is old and unpatentable. In re Becket, 33 USPQ 33.

Art Unit: 1616

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103c and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is (703) 308-4550.

A handwritten signature in black ink, appearing to read "S. Mark Clardy", is written over a horizontal line.

S. Mark Clardy
Primary Examiner
AU 1616

June 30, 2003